the female accompanied by a male during oviposition. Sometimes the eggs were deposited by striking the tip of the abdomen against bits of floating algae or pieces of sticks and stems extending from the water, sometimes by striking the abdomen against the surface of small pools of water in lily leaves, or in hoof prints along the margin of a pond. I have never been able to make close enough observation to determine if the "explosion" occurs when the egg mass is deposited in this manner.

Many females of this species which were not ovipositing when captured have been induced to extrude masses of eggs by striking the abdomen against the surface of water. However, none of these masses "exploded," although the eggs separated readily after being in water a short time.

Sometime ago I discovered in the field notes turned over to me by Mr. Williamson a short time before his death, a record of his (first?) observation of this phenomenon. It was made at Viberg Lake, Allen County, Indiana, August 14, 1921, and is recorded as follows: "Female oviposits unattended by male. Female was held until bunch of eggs extruded; abdomen was touched to water. Bunch of eggs sank an inch or two and burst, scattering eggs widely."

Females of other libelluline genera common in Indiana (*Sympetrum, Celithemis, Libellula*) captured in the act of ovipositing were tested in the same manner. Egg masses usually were secured by striking the abdomen against the surface of water but none of these "exploded."

Notes and Descriptions of West American Cerambycidae (Coleoptera). III.[1]

By E. Gorton Linsley,[2] University of California, Berkeley, California.

[1] The previous papers in this series appeared in Entom. News, 1934, 65:161-165, 181-185, and 1935, 66:161-166.

[2] The writer is indebted to Mr. W. S. Fisher for examination of the two forms described below as new genera and for comparison of these with material in the collection of the United States National Museum and to Dr. Edwin C. Van Dyke, Mr. A. T. McClay, and Mr. H. L. McKenzie for the privilege of studying material from their collections.

Methia juniperi new species.

♂ : small, short, dark piceous, sparsely clothed with short, fine, suberect hairs; antennae piceous; elytra pale testaceous.

Head transverse, width across eyes as great as that of pronotum across middle; surface coarsely, moderately closely punctate; eyes convex, separated above (♂) by more than the diameter of the antennal scape; antennae slender, moderately pubescent, two-thirds as long again as the body (♂); scape subconical, without trace of an apical tooth.

Pronotum a little wider than long, sides rounded, base only very feebly constricted; surface finely, closely punctured, sparsely clothed with moderately long, recumbent pubescence. Elytra about twice as long as broad, much shorter than the body and attaining only basal portion of second abdominal segment; sides gradually narrowed to apical one-third; apices separately rounded, a little dehiscent. Legs slender, moderately finely punctured, clothed with long, suberect, pale hairs; tarsi slender, first segment of posterior pair subequal in length to second and third together.

Ventral surface finely punctured, sparsely clothed with pale, suberect hairs. Length 6mm., breadth 1.3mm.

Holotype male (No. 4150 Calif. Acad. Sci. Ent.), from Palmdale, Mojave Desert, CALIFORNIA, November 21, 1935, reared from *Juniperus californica* by Mr. A. T. McClay, who very kindly submitted the specimen to me for study. The type was reared from twigs which had been girdled by the larvae of *Styloxus bicolor* Ch.&Kn.

This species is related to *M. aestiva* Fall, but may be readily separated by the greatly abbreviated elytra which attain only the second abdominal segment, the absence of a tooth at the apex of the antennal scape, the uniformly punctured pronotum which is wider than long, the dark color of the head, thorax, and abdomen, and the short, sparse pubescence of the antennae and upper surface. From *falli* Martin, which it resembles in general form, it may be distinguished by the widely separated eyes on the vertex (♂), narrowly rounded and dehiscent elytral apices, and by the difference in color.

The species of *Methia* are nearly all rare in collections. *M. mormona* Linell (1896), the earliest described of our western

species, appears to be the most widely distributed and abundant. It occurs throughout the Great Basin area and exhibits considerable variation in size and coloration in various portions of its range. A small series sent to the writer from Globe, Arizona by Mr. Frank Parker, differs from the typical form in being pale testaceous rather than dark brownish piceous, and the elytra are without ornamentation. This pale form appears to be merely a color variety and examples were captured along with typical specimens. *M. aestiva* Fall (1907) and *M. arizonica* Schiffr. (1908) are probably represented in collections by less than two dozen examples each. *M. falli* Martin (1920) is known at present only by the type. *M. brevis* Fall (1929) was likewise described from a unique but a second example has been recorded from Lower California.[3] In the writer's collection are three additional males from San Diego County, California, and what appears to be a female of this species from Claremont, California. The latter is stouter and more robust than the males, and the elytra are ornamented with pale vittae.

PSEUDOMETHIA, new genus.

Head transverse; labrum ciliate with long fine hairs; palpi very unequal in length, the maxillary longer, last segment subcylindrical, apex truncate; eyes very large, convex, coarsely faceted, emarginate; antennal tubercles not strongly elevated, separated by a narrow furrow on vertex; antennae longer than the body, basal segments rather stout, segments three to five very finely, feebly carinate; scape subconical, more than twice as long as broad, second segment wider than long, about one-fourth the length of the scape, third segment not quite as long as scape, enlarged apically, fourth segment about one-fourth longer than third, subcylindrical, fifth, sixth, and seventh segments subequal in length, about twice as long as scape, remaining segments becoming a little shorter and more slender to the apex.

Pronotum about as long as broad, sides with an obtuse, con-

[3] Linsley, E. G., *Studies in the Cerambycidae of Lower California*, Pan-Pacific Ent. 10:59, 1934.

ical, lateral tubercle a little behind the middle. Elytra abbreviated, not attaining apex of first abdominal segment; apices separately rounded. Legs slender; anterior femora feebly clavate, middle and posterior pairs slender; tarsi elongate, narrow, first segment of posterior pair much longer than second and third segments together. Anterior coxae prominent, conical, cavities large, confluent, angulated externally, open behind; middle coxal cavities open externally. Abdomen with six visible segments; sixth ventral segment of male excavated at apex.

Genotype: *Pseudomethia arida* n. sp.

This genus is based upon a species which diverges markedly in the structure and proportions of the antennae from other known Methiini, but which seems better placed in this tribe than in any other described group. In the previously known Methiini the antennae are very long and slender (usually about twice as long as the body in the male, a little longer than the body in the female), with the segments narrow and rather uniform in width, the second very small, often scarcely visible, the third segment longer than either the scape or following segments. In the present genus the basal antennal segments are stout, the antennae but little longer than the body in the male, the second segment large and conspicuous, the third segment shorter than either the scape or fourth segment and slightly enlarged at the apex, and segments three to five very finely and feebly carinate.* The posterior tarsi (which are short in other Methiini) are very long and slender, distinctly more than half as long as the tibiae, and the pronotum is armed laterally with an obtuse, conical tubercle.

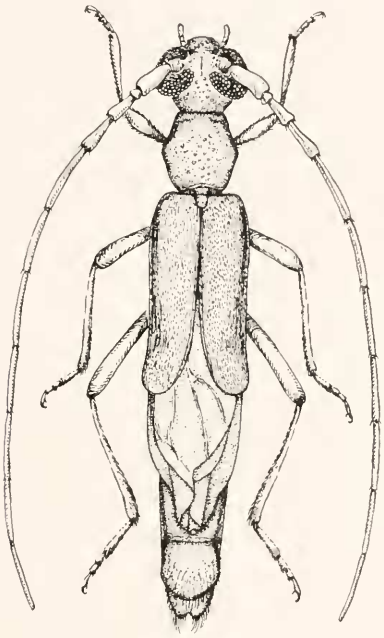
Pseudomethia arida new species (fig).

♂ : small, slender, brownish, testaceous. Head sparsely clothed with short, fine, pale hairs; vertex coarsely punctured with numerous small punctures intermixed; eyes separated on vertex by approximately the diameter of the antennal scape, less widely separated below; antennae sparsely clothed with very short, fine pubescence and with one or two long setae at apex of segments. Pronotum moderately punctured, clothed

* These carinae are visible only under low power magnification.

with short, fine, suberect, pale hairs intermixed with scattered, long, erect setae. Elytra somewhat granulate-punctate, surface clothed with short, suberect, sparse pubescence. Legs more densely clothed with long flying hairs. Ventral surface shining; abdomen very finely, sparsely, punctured and pubescent. Length 7 mm., breadth 1.3 mm.

Holotype male (No. 4161 Calif. Acad. Sci. Ent.), taken from *Simmondsia californica*, in the desert about ten miles



Pseudomethia arida n. sp.

west of Indio, CALIFORNIA, on September 9, 1935, by Mr. Howard L. McKenzie, to whom the writer is indebted for the specimen.

A small, uniformly brownish species, somewhat suggestive of a *Methia* but readily distinguishable by the generic characters.

GYMNOPSYRA, new genus.

Head short, transverse; eyes coarsely granulated, emarginate; labrum transverse, ciliate; palpi short, antennal tubercles depressed, contiguous; antennae eleven-segmented, stout, shorter

than the body (♀), segments three to seven with a stout spine at the apex, three to ten ciliate at apex; scape stout, slightly conical, about as long as segments two and three together; second segment a little longer than broad, third segment about four times as long as second, fourth segment about one-fourth shorter than third, segments five, six, and seven subequal in length to third, remaining segments slightly shorter, more slender, except eleventh which is longer than tenth.

Pronotum a little broader than long, sides rounded. Scutellum transverse, subtriangular. Elytra about three times as long as broad, parallel-sided; apices rotundate-truncate. Legs slender; femora not clavate; tibiae carinate; tarsi with first segment of posterior pair subequal to two following together. Prosternum narrow between the coxae; anterior coxae globular, cavities feebly angulated; mesosternum broad between the coxae, separating them by about twice the distance between the anterior coxae; middle coxae globular, cavities closed externally.

Genotype: *Gymnopsyra phoracanthoides* n. sp.

A genus apparently related to *Psyrassa* and *Stenosphenus* but differing from these in the non-carinate antennae, rotundate rather than emarginate or spinose elytral apices, and the rounded, coarsely sculptured pronotum (in *Psyrassa* the pronotum is cylindrical, in *Stenosphenus* wedge-shaped, in both genera usually sparsely punctured and shining). The spine on the third antennal segment is moderate as in *Stenosphenus* and the elytral punctation is of the *Stenosphenus* type (the punctures coarse and dense in the basal area and becoming very much finer, sparser apically).

Gymnopsyra phoracanthoides new species.

♀: elongate, piceous, shining, sparsely clothed with very short, fine hairs; antennae and legs rufo-piceous. Head coarsely, moderately closely punctured. Pronotum very coarsely, densely punctured, the punctures tending to become confluent; disc with a small, smooth, median polished area. Scutellum finely punctured, finely pubescent along apical margin. Elytra very coarsely punctured at base, the punctures becoming much finer, sparser apically. Prosternum coarsely punctured, anteriorly transversely rugose. Mesosternum coarsely, closely punctured.

Metasternum and abdomen more sparsely and less coarsely punctured, sparsely clothed with pale, suberect hairs. Fifth ventral abdominal segment truncate at apex (♀). Length 12 mm., breadth 3 mm.

Holotype female (No. 4152 Calif. Acad. Sci. Ent.) from Glen Ranch, Alpine, Texas, 1926, O. C. Poling collector (Van Dyke Collection, Calif. Academy of Sciences).

The Membracidae of Nebraska (Homoptera).

By Harold C. Jones, Berry College, Mount Berry, Georgia.

The investigation summarized in this paper is concerned with the tree-hoppers found in Nebraska by associates of the University of Nebraska during the half century preceding 1933. Data are offered regarding abundance, geographic and seasonal occurrence and host relations. The writer has studied the membracids in the collection of the University of Nebraska, Department of Entomology, and has made special field studies during the years 1932 and 1933. Many specimens, with pertinent data, were collected during a trip through the peripheral counties of Nebraska in the summer of 1932.

The nomenclature and arrangement of species herein used follows that of W. D. Funkhouser's General Catalogue (1927). Of the fifty genera and one hundred eighty-five species listed by Funkhouser as occurring within the United States, the Nebraska fauna includes eighteen genera with forty species and six varieties. The species verified by a specialist, Dr. E. D. Ball, Economic Zoologist of the Arizona Agricultural Experiment Station, are succeeded by the symbol (B). The author gratefully acknowledges the valuable assistance of Dr. Ball, as well as that of Professors M. H. Swenk, D. B. Whelan and Raymond Roberts of the University of Nebraska.

Campylenchia Latipes (Say) (B). Of general distribution; collected from May 20 to September 25, most commonly in July. This is the most abundant treehopper in the state, being represented by about 400 specimens in the collection. Alfalfa is the favorite host and is at times reported damaged by this insect. The wide variety of hosts includes: oak, snowberry (*Symphoricarpos* spp.), rose; and more than 20 herbaceous species, of which alfalfa, sweet clovers, ragweeds and